

Title (en)
Gerotor motor balancing plate structure

Title (de)
Gerotormotor Ausgleichsplatte Struktur

Title (fr)
Structure de plaque d'équilibrage pour moteur Gerotor

Publication
EP 2719861 A1 20140416 (EN)

Application
EP 13186944 A 20131001

Priority
• US 201261713148 P 20121012
• US 201261731503 P 20121130
• US 201313972415 A 20130821

Abstract (en)
A gerotor device includes a valving plate, a balancing plate structure, and a rotor positioned between the valving plate and the balancing plate structure. High pressure fluid flowing from the valving plate toward the rotor pushes the rotor toward the balancing plate structure. The balancing plate structure includes a balancing plate and a second plate. A cavity is defined between the balancing plate and the second plate. The balancing plate includes a fluid passage having a check valve and fluid passes through the fluid passage for pressuring the cavity. The balancing plate includes first and second relief holes extending through the balancing plate connected with the cavity.

IPC 8 full level
F01C 1/10 (2006.01); **F01C 20/20** (2006.01); **F01C 20/24** (2006.01); **F01C 20/26** (2006.01); **F04C 2/10** (2006.01); **F04C 15/00** (2006.01)

CPC (source: EP US)
F01C 1/10 (2013.01 - US); **F01C 20/20** (2013.01 - EP US); **F01C 20/24** (2013.01 - EP US); **F01C 20/265** (2013.01 - US); **F04C 2/104** (2013.01 - EP US); **F04C 2/105** (2013.01 - EP US); **F04C 15/0042** (2013.01 - EP US)

Citation (applicant)
• US 4717320 A 19880105 - WHITE JR HOLLIS N [US]
• US 4474544 A 19841002 - WHITE JR HOLLIS N [US]

Citation (search report)
• [XY] US 2004052667 A1 20040318 - DONG XINGEN [US]
• [Y] WO 2006125010 A2 20061123 - WHITE DRIVE PRODUCTS INC [US], et al
• [Y] EP 1026400 A2 20000809 - EATON CORP [US]
• [A] US 4877383 A 19891031 - WHITE JR HOLLIS N [US]

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2719861 A1 20140416; **EP 2719861 B1 20160302**; CN 103727025 A 20140416; CN 103727025 B 20170623; DK 2719861 T3 20160404; PL 2719861 T3 20160831; US 2014105775 A1 20140417; US 9163508 B2 20151020

DOCDB simple family (application)
EP 13186944 A 20131001; CN 201310454882 A 20130929; DK 13186944 T 20131001; PL 13186944 T 20131001; US 201313972415 A 20130821